

WHAT IS CLAIMED

1. (Currently Amended) A method, comprising:

indicating to one or more remote systems in a distributed data processing system that a task, in a task list, is available for processing based on a distribution list, wherein the task is a compilation task and wherein the indication specifies at least one resource requirement that is desired;

receiving at least one response from the one or more remote systems capable of performing the task responsive to the indication, wherein the at least one response is based on a determination by at least one of the remote systems that the at least one resource requirement is satisfied; and

assigning the task from the task list to the first remote system to respond.

2. (Original) The method of claim 1, wherein the distribution list comprises destination addresses associated with the one or more remote systems, wherein indicating to the one or more remote systems comprises providing a message to a router that, responsive to the message, transmits at least a portion of the message to a plurality of the remote systems based on the distribution list.

3. (Currently Amended) The method of claim 1, ~~wherein the task is at least one of a compilation task, video processing task, audio processing task, image processing task, encryption task, and decryption task, and~~ wherein indicating to the one or more remote systems comprises indicating a threshold criterion that the one or more remote systems should satisfy, and wherein receiving the at least one response comprises receiving the at least one response from the one or more remote systems that satisfy the threshold criterion.

4. (Original) The method of claim 3, wherein indicating the threshold criterion comprises indicating at least one of a preselected processing speed, memory size, and network speed that is desired for the one or more remote systems.

5. (Currently Amended) The method of claim 3, wherein receiving the at least one response comprises receiving configuration information associated with the one or more remote systems, and wherein the first remote system to respond refers to at least one of the first remote system to generate a response and the first remote system to have its response received by the client.

6. (Original) The method of claim 5, wherein receiving the configuration information comprises receiving information including at least one of a processing speed, memory size, network speed, and load level associated with the one or more remote systems.

7. (Previously Presented) The method of claim 6, wherein allowing at least one of the remote systems to perform the task comprises allowing at least one of the remote systems to perform the task based on a selection scheme, wherein the selection scheme comprises at least one of allowing a remote system that responds first to perform the task and allowing a remote system to perform the compilation task based on the received configuration information.

8. (Previously Presented) The method of claim 1, wherein the distribution list is a multicast list, and wherein indicating to the one or more remote systems comprises providing a message to a router that, responsive to the message, transmits, via multicast, at least a portion of the message to a plurality of the remote systems based on the distribution list.

9. (Original) The method of claim 1, wherein the act of indicating comprises indicating that the compilation task is available for processing, and wherein the act of receiving

comprises receiving the at least one response from a remote system that has reserved at least a portion of its resources for performing the task.

10. (Currently Amended) An article comprising one or more machine-readable storage media containing instructions that when executed enable a processor to:

indicate to a plurality of remote systems in a distributed data processing system that a task in a task list is available for processing based on a distribution list identifying the remote systems, wherein the task is a compilation task and wherein the indication specifies at least one resource requirement that is desired; and assign, based on a determination by at least one of the remote systems that at least one or more of the resource requirements is satisfied, the task from the task list to the first remote system to respond.

11. (Original) The article of claim 10, wherein the task is a compilation task, and wherein the instructions when executed enable the processor to allow at least one of the plurality of remote systems based on a selection scheme.

12. (Original) The article of claim 11, wherein the instructions when executed enable the processor to allow that remote system which responds first to perform the task.

13. (Original) The article of claim 11, wherein the instructions when executed enable the processor to allow the remote system having at least one of a higher processing speed among the plurality of responding remote systems to perform the task and a desirable performance characteristic, wherein the performance characteristic is determined based on past performance.

14. (Original) The article of claim 11, wherein the instructions when executed enable the processor to allow a plurality of remote systems to perform the task in response

to determining that a number of responding remote systems exceed a number of available tasks.

15. (Original) The article of claim 11, wherein the instructions when executed enable the processor to receive responses from at least one of the plurality of the remote systems, wherein the response includes configuration information associated with the one or more remote systems.

16. (Original) The article of claim 10, wherein the instructions when executed enable the processor to multicast a request to the plurality of remote systems coupled to a network that the task is available for processing.

17. (Original) The article of claim 10, wherein the instructions when executed enable the processor to receive results from the at least one remote system that is allowed to perform the task.

18. (Currently Amended) An apparatus, comprising:

means for indicating to one or more remote systems in a distributed data processing compilation system that a task in a task list is available for processing based on a distribution list identifying the one or more remote systems and wherein the means for indicating specifies at least one resource requirement that is desired;

means for receiving at least one response from the one or more remote systems capable of performing the task based on the indication, wherein the at least one response is based on a determination by at least one of the remote systems that the at least one resource requirement is satisfied; and

means for assigning the task from the task list to the first remote system to respond.

19. (Currently Amended) An apparatus, comprising:
an interface adapted to communicate with one or more remote systems; and
a control unit communicatively coupled to the interface, the control unit adapted to:
indicate to the one or more remote systems in a distributed data processing
compilation system that a task in a task list is available for processing based
on a distribution list identifying the one or more remote systems, wherein
the indication specifies at least one resource requirement that is desired;
receive at least one response from the one or more remote systems capable of
performing the task based on the indication, wherein the at least one
response is based on a determination by at least one of the remote
systems that the at least one resource requirement is satisfied; and
assign the task from the task list to the first remote system to respond.

20. (Previously Presented) The apparatus of claim 19, wherein the task is a
compilation task, wherein the control unit is adapted to send a multicast message to a
plurality of the remote systems on a network that a compilation task is available, and
wherein the multicast message is sent to a multicast address on a router which in turn
completes the multicast.

21. (Original) The apparatus of claim 20, wherein the control unit is adapted to
indicate a threshold criterion that the one or more remote systems should satisfy and further
adapted to receive the at least one response from the one or more remote systems that
satisfy the threshold criterion.

22. (Original) The apparatus of claim 21, wherein the control unit is adapted to indicate at least one of a minimum processing speed, memory amount, and network speed that is desired for the one or more remote systems.

23. (Original) The apparatus of claim 21, wherein the control unit is adapted to receive configuration information associated with the one or more remote systems.

24. (Original) The apparatus of claim 23, wherein the control unit is adapted to receive information including at least one of a processing speed, memory size, network speed, and load level associated with the one or more remote systems.

25. (Original) The apparatus of claim 24, wherein the control unit is adapted to allow at least one of the remote systems to perform the task based on a selection scheme.

26. (Original) The apparatus of claim 25, wherein the selection scheme comprises allowing a remote system that responds first to perform the compilation task

27. (Original) The apparatus of claim 25, wherein the selection scheme comprises allowing a remote system to perform the compilation task based on the received configuration information.

28. (Original) The apparatus of claim 19, wherein the control unit is adapted to identify the task that is available for processing in a queue that is accessible by one or more of the remote systems.

29. (Currently Amended) A distributed compilation system, comprising:
one or more remote systems;
a client system adapted to:

indicate to the one or more remote systems that a compilation task in a task list is
available for processing based on a distribution list identifying the one or

more remote systems, wherein the indication specifies at least one resource requirement that is desired;

receive at least one response from the one or more remote systems capable of performing the compiling task based on the indication wherein the at least one response is based on a determination by at least of one of the remote systems that the at least one resource requirement is satisfied; and assign the task from the task list to the first remote system to respond.

30. (Original) The distributed compilation system of claim 29, wherein the client system multicasts a message to the one or more remote networks over a data network.

31. (Original) The distributed compilation system of claim 29, wherein at least one of the remote systems is adapted to:

detect an indication from the client system that a compilation task is available for processing;

determine if the at least one remote system is capable of processing the compilation task; and

process the compilation task for the client system in response to determining that at least one remote system is capable of processing the compilation task.

32. (Currently Amended) A method, comprising:

detecting an indication from a client system to process one or more compilation tasks, wherein the indication specifies at least one resource requirement that is desired;

determining if a remote system that detects the indication is capable of processing at least one of the one or more compilation tasks in response to detecting the

indication from the client system, wherein the determination takes place at the remote system;

reserving one or more resources of the remote system in response to determining that the remote system is capable of processing the at least one of the compilation task; and

processing the at least one compilation task for the client system in response to at least one or more of the compilation tasks from the client system being assigned to the ~~first~~ remote system.

33. (Previously Presented) The method of claim 32, wherein the indication was based on a distribution list identifying the one or more remote systems, and wherein the request from the client system was a multicast request, further comprising providing results of the processing to the client system.

34. (Original) The method of claim 32, wherein the processing comprises accessing a queue associated with the client system and determining the compilation task to process.

35. (Currently Amended) A method, comprising:

indicating to one or more remote systems in a distributed data processing system that a task in a task list is available for processing, wherein the indication specifies at least one resource requirement that is desired;

receiving at least one response from the one or more remote systems capable of performing the task responsive to the indication wherein the at least one response is based on a determination by at least one of the remote systems that the at least one resource requirement is satisfied; and
assigning the task from the task list to the first remote system to respond.

36. (Previously Presented) The method of claim 35, wherein the distributed system is a distributed compilation system, and wherein indicating comprises indicating to the one or more remote systems that a compilation task is available for processing, wherein the indication was based on a distribution list identifying the one or more remote systems, and wherein the request from the client system was a multicast request, and further wherein receiving the at least one response comprises receiving the at least one response from the one or more remote systems capable of performing the compilation task responsive to the indication.

37. (New) The method of claim 35, wherein the task is at least one of a compilation task, a video processing task, audio processing task, image processing task, encryption task, and decryption task,